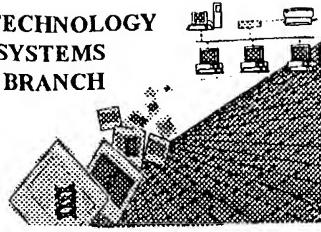


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/672,069
Source: JFWO
Date Processed by STIC: 5/26/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04



IFWO

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/672,069

DATE: 05/26/2004
TIME: 14:09:02

Input Set : A:\SEQLIST.txt
Output Set: N:\CRF4\05262004\J672069.raw

4 <110> APPLICANT: RANA, Tariq M.
 5 CHIU, Ya-Lin
 8 <120> TITLE OF INVENTION: IN VIVO GENE SILENCING BY CHEMICALLY
 9 MODIFIED AND STABLE siRNA
 12 <130> FILE REFERENCE: UMY-062
 14 <140> CURRENT APPLICATION NUMBER: 10/672069
 15 <141> CURRENT FILING DATE: 2003-09-25
 17 <150> PRIOR APPLICATION NUMBER: 60/413529
 18 <151> PRIOR FILING DATE: 2002-09-25
 20 <150> PRIOR APPLICATION NUMBER: 60/426982
 21 <151> PRIOR FILING DATE: 2002-11-15
 23 <150> PRIOR APPLICATION NUMBER: 60/458051
 24 <151> PRIOR FILING DATE: 2003-03-25
 26 <150> PRIOR APPLICATION NUMBER: 60/493095
 27 <151> PRIOR FILING DATE: 2003-08-05
 29 <160> NUMBER OF SEQ ID NOS: 34
 31 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 33 <210> SEQ ID NO: 1
 34 <211> LENGTH: 21
 35 <212> TYPE: DNA
 36 <213> ORGANISM: Artificial Sequence
 38 <220> FEATURE:
 39 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20
 40 and 21
 42 <400> SEQUENCE: 1
 43 gcagcacgac uucuucaagt t
 45 <210> SEQ ID NO: 2
 46 <211> LENGTH: 21
 47 <212> TYPE: DNA
 48 <213> ORGANISM: Artificial Sequence
 50 <220> FEATURE:
 51 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20
 52 and 21
 54 <400> SEQUENCE: 2
 55 cuugaagaag ucgugcugt t
 57 <210> SEQ ID NO: 3
 58 <211> LENGTH: 21
 59 <212> TYPE: RNA
 60 <213> ORGANISM: Artificial Sequence
 62 <220> FEATURE:
 63 <223> OTHER INFORMATION: siRNA target sequence
 65 <400> SEQUENCE: 3
 66 aagcagcacg acuuuucaa g

pp 1-5

Does Not Comply
Corrected Diskette Needed

Please explain source of genetic material.

This does not explain the source
of the Artificial
Sequence material.

Explain source of Artificial
sequence. FYI: For a combined
DNA/RNA sequence, please
describe combined DNA/RNA in <220>-<223>
describe it in the
<220>-<223>
section

21

21

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/672,069

DATE: 05/26/2004
TIME: 14:09:02

Input Set : A:\SEQLIST.txt
Output Set: N:\CRF4\05262004\J672069.raw

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 69 <211> LENGTH: 21
 70 <212> TYPE: RNA
 71 <213> ORGANISM: Artificial Sequence
 73 <220> FEATURE:
 74 <223> OTHER INFORMATION: siRNA target sequence
 76 <400> SEQUENCE: 4
 77 aagguggagc gcgugauagaa c 21
 79 <210> SEQ ID NO: 5
 80 <211> LENGTH: 21 *give source* combined DNA/RNA sequence
 81 <212> TYPE: DNA explain in L2207-L2237
 82 <213> ORGANISM: Artificial Sequence
 84 <220> FEATURE:
 85 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20 and 21
 86 <400> SEQUENCE: 5
 88 guggggagcgc gugaugaaact t 21
 89 guggggagcgc gugaugaaact t
 91 <210> SEQ ID NO: 6
 92 <211> LENGTH: 21
 93 <212> TYPE: DNA
 94 <213> ORGANISM: Artificial Sequence combined DNA/RNA sequence - explain
 96 <220> FEATURE:
 97 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20 and 21
 100 <400> SEQUENCE: 6
 101 guucaucacg cgccucccaact t 21
 103 <210> SEQ ID NO: 7
 104 <211> LENGTH: 21 *give source* combined DNA/RNA sequence
 105 <212> TYPE: DNA
 106 <213> ORGANISM: Artificial Sequence
 108 <220> FEATURE:
 109 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20 and 21
 110 <400> SEQUENCE: 7
 112 <220> FEATURE:
 113 <221> NAME/KEY: modified_base
 114 <222> LOCATION: 1
 115 <223> OTHER INFORMATION: 5'-aminopropyl-modified guanosine
 117 <400> SEQUENCE: 7
 118 gcagcacacgac uucuucaagt t 21
 120 <210> SEQ ID NO: 8
 121 <211> LENGTH: 21 *give source* combined DNA/RNA sequence
 122 <212> TYPE: DNA
 123 <213> ORGANISM: Artificial Sequence
 125 <220> FEATURE:
 126 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20 and 21
 127 <400> SEQUENCE: 8
 129 <220> FEATURE:
 130 <221> NAME/KEY: modified_base
 131 <222> LOCATION: 1

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/672,069

DATE: 05/26/2004
TIME: 14:09:02

Input Set : A:\SEQLIST.txt
Output Set: N:\CRF4\05262004\J672069.raw

132 <223> OTHER INFORMATION: 5'-aminopropyl-modified cytidine
 134 <400> SEQUENCE: 8
 135 cuugaagaag ucgugcugct t 21
 137 <210> SEQ ID NO: 9
 138 <211> LENGTH: 21 give source
 139 <212> TYPE: DNA
 140 <213> ORGANISM: Artificial Sequence combined DNA/RNA
 142 <220> FEATURE:
 143 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at position 20
 145 <220> FEATURE:
 146 <221> NAME/KEY: modified_base
 147 <222> LOCATION: 21
 148 <223> OTHER INFORMATION: 3'-Puromycin modified deoxythymidine
 150 <400> SEQUENCE: 9
 151 gcagcacgac uucuucaagt t 21
 153 <210> SEQ ID NO: 10
 154 <211> LENGTH: 21 give source
 155 <212> TYPE: DNA
 156 <213> ORGANISM: Artificial Sequence combined DNA/RNA
 158 <220> FEATURE:
 159 <223> OTHER INFORMATION: RNA molecule with deoxythymidine at position 20
 161 <220> FEATURE:
 162 <221> NAME/KEY: modified_base
 163 <222> LOCATION: 21
 164 <223> OTHER INFORMATION: 3'-Puromycin-modified deoxythymidine
 166 <400> SEQUENCE: 10
 167 cuugaagaag ucgugcugct t 21
 169 <210> SEQ ID NO: 11
 170 <211> LENGTH: 21 give source
 171 <212> TYPE: DNA
 172 <213> ORGANISM: Artificial Sequence combined DNA/RNA
 174 <220> FEATURE:
 175 <223> OTHER INFORMATION: RNA molecule with deoxythymidine at position 20
 176 and 3'-Biotin-modified deoxythymidine at position
 177 21
 179 <220> FEATURE:
 180 <221> NAME/KEY: modified_base
 181 <222> LOCATION: 21
 182 <223> OTHER INFORMATION: 3'-Biotin-modified deoxythymidine
 184 <400> SEQUENCE: 11
 185 cuugaagaag ucgugcugct t 21
 187 <210> SEQ ID NO: 12
 188 <211> LENGTH: 23 give source
 189 <212> TYPE: DNA
 190 <213> ORGANISM: Artificial Sequence combined DNA/RNA
 192 <220> FEATURE:
 193 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 22
 194 and 23
 196 <400> SEQUENCE: 12

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/672,069

DATE: 05/26/2004
TIME: 14:09:02

Input Set : A:\SEQLIST.txt
Output Set: N:\CRF4\05262004\J672069.raw

197 gcagcacgac uguucuucaa gtt 23
 199 <210> SEQ ID NO: 13
 200 <211> LENGTH: 23
 201 <212> TYPE: DNA
 202 <213> ORGANISM: Artificial Sequence
 204 <220> FEATURE:
 205 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 22
 206 and 23
 208 <400> SEQUENCE: 13
 209 cuugaagaaa cgucgugcug ctt 23
 211 <210> SEQ ID NO: 14
 212 <211> LENGTH: 21
 213 <212> TYPE: DNA
 214 <213> ORGANISM: Artificial Sequence
 216 <220> FEATURE:
 217 <223> OTHER INFORMATION: RNA molecule with deoxynucleosides at positions
 218 1-21
 220 <400> SEQUENCE: 14
 221 cuugaagaag ucgugcugct t 21
 223 <210> SEQ ID NO: 15
 224 <211> LENGTH: 21
 225 <212> TYPE: DNA
 226 <213> ORGANISM: Artificial Sequence
 228 <220> FEATURE:
 229 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20
 230 and 21
 232 <220> FEATURE:
 233 <221> NAME/KEY: modified_base
 234 <222> LOCATION: 2', 3', 11, 14, 17
 235 <223> OTHER INFORMATION: 2'-fluoro uridine
 237 <220> FEATURE:
 238 <221> NAME/KEY: modified_base
 239 <222> LOCATION: 1, 12, 16, 19
 240 <223> OTHER INFORMATION: 2'-fluoro cytidine
 242 <400> SEQUENCE: 15
 243 cuugaagaag ucgugcugct t 21
 245 <210> SEQ ID NO: 16
 246 <211> LENGTH: 21
 247 <212> TYPE: DNA
 248 <213> ORGANISM: Artificial Sequence
 250 <220> FEATURE:
 251 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20
 252 and 21, deoxyadenosine at position 9 and
 253 deoxyguanosine at positions 10 and 13
 255 <220> FEATURE:
 256 <221> NAME/KEY: modified_base
 257 <222> LOCATION: 2', 3', 11, 14, 17
 258 <223> OTHER INFORMATION: 2'-fluoro uridine
 260 <220> FEATURE:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/672,069

DATE: 05/26/2004
TIME: 14:09:02

Input Set : A:\SEQLIST.txt
Output Set: N:\CRF4\05262004\J672069.raw

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261 <221> NAME/KEY: modified_base
262 <222> LOCATION: 4, 12, 16, 19
263 <223> OTHER INFORMATION: 2'-fluoro cytidine
265 <400> SEQUENCE: 16
266 cuugagag agugugct t 21
268 <210> SEQ ID NO: 17
269 <211> LENGTH: 21
270 <212> TYPE: DNA
271 <213> ORGANISM: Artificial Sequence
273 <220> FEATURE:
274 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20
275 and 21, deoxyadenosine at position 9 and
276 deoxyguanosine at positions 10, 13, 15 and 18
278 <220> FEATURE:
279 <221> NAME/KEY: modified_base
280 <222> LOCATION: 2, 3, 11, 14, 17
281 <223> OTHER INFORMATION: fluoro uridine
283 <220> FEATURE:
284 <221> NAME/KEY: modified_base
285 <222> LOCATION: 4, 12, 16, 19
286 <223> OTHER INFORMATION: 2'-fluoro cytidine
288 <400> SEQUENCE: 17
289 cuugagag agugugct t 21
291 <210> SEQ ID NO: 18
292 <211> LENGTH: 21
293 <212> TYPE: DNA
294 <213> ORGANISM: Artificial Sequence
296 <220> FEATURE:
297 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20
298 and 21, deoxyadenosine at position 5, 6, 8, 9 and
299 deoxyguanosine at positions 4, 7, 10 and 13
301 <220> FEATURE:
302 <221> NAME/KEY: modified_base
303 <222> LOCATION: 2, 3, 11, 14, 17
304 <223> OTHER INFORMATION: 2'-fluoro uridine
306 <220> FEATURE:
307 <221> NAME/KEY: modified_base
308 <222> LOCATION: 4, 12, 16, 19
309 <223> OTHER INFORMATION: 2'-fluoro cytidine
311 <400> SEQUENCE: 18
312 cuugagag agugugct t 21
314 <210> SEQ ID NO: 19
315 <211> LENGTH: 21
316 <212> TYPE: DNA
317 <213> ORGANISM: Artificial Sequence
319 <220> FEATURE:
320 <223> OTHER INFORMATION: RNA molecule with deoxythymidines at positions 20
321 and 21, deoxyadenosine at position 5, 6, 8, 9 and
322 deoxyguanosine at positions 4, 7, 10, 13, 15 and

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The types of errors shown exist throughout
the Sequence Listing. Please check subsequent
sequences for similar errors.

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/672,069

DATE: 05/26/2004

TIME: 14:09:03

Input Set : A:\SEQLIST.txt

Output Set: N:\CRF4\05262004\J672069.raw